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## Chapter 2. Installing Your System Unit

This chapter provides instructions to help you set up your 7587 Computer. For complete system unit dimensions, see Appendix B, "Physical Dimensions."

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### Before You Begin

- Make sure you know the correct voltage setting for your country. If you are not sure of the voltage setting for your country, contact your place of purchase.
- Make sure you have an adequate number of properly grounded electrical outlets for your system unit, display, and printer.
- Plan to place your system unit in a location that is dry and as clean as possible. Contaminants could cause damage to the system unit.
- Plan to leave enough space around the system unit to allow the system unit's cooling system to work properly.
- Plan to leave enough space around the system unit to allow for proper service access. (This space will vary, depending on the type of mounting to be used.)
- Have this publication handy in case you need additional information.
- Have blank diskettes available to back up utility and startup programs.

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### Task 1. Unpack Your System Unit

#### **CAUTION:**

**To avoid possible injury while moving or lifting the system unit, ask another person to help you.**

Remove the 7587 Computer from its shipping carton, along with all other materials in that carton. Also unpack all devices to be attached externally to the system unit—for example: power cord, keyboard, monitor, printer, mouse, and cables. (To prevent possible damage, do not unpack delicate internal components yet. Unpack them when you are ready to install them.)

If any items are missing, contact your place of purchase.

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### Task 2. Check the Voltage Setting

**The power supply on the 7587 Computer has a switch on it that must be manually set before the system unit is turned on.** The switch is located in the area next where the power cord plugs into the system unit. It is marked either "110" and "220" or "115" and "230."

Use the following instructions to set the switch. You can use a ball-point pen to slide the switch to the correct position.

- If the voltage range in your country is between 100 and 127 volts, set the switch so "110" or "115" is visible.
- If the voltage range in your country is between 200 and 240 volts, set the switch so "220" or "230" is visible.

#### **Attention**

Be sure the voltage-selection switch is in the correct position. If you set this switch to the wrong position, you will damage your system unit when you turn it on.

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## Task 3. Secure the System Unit

Rubber feet are included with the system unit. Attach the feet to the bottom of the system unit. Make sure the system unit is standing firmly on all four padded feet; then proceed to the next task.

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## Task 4. Install Internal Options

Internal options are devices that are installed inside your system unit. Memory upgrade options are mounted directly to the SBC. Other internal options are installed in drive bays and expansion slots.

**Note:** Some options require device drivers. Refer to the instructions that came with each option to determine if a device driver is required and how to install it.

- If you do not have any options to install inside your system unit, go directly to “Task 5. Connect the Cables.”
- If you have options to install but you want to check out your system unit before installing the options, go to “Task 5. Connect the Cables.”
- If you have options to install, install them before the system unit is mounted and the cables are attached. For option installation instructions, use the appropriate procedures in Chapter 3, “Installing Options,” and then go to “Task 5. Connect the Cables.”

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## Task 5. Connect the Cables

Connect all system unit cables in the following order.

1. Connect all cables between the system unit and the keyboard, the mouse, the display, and all other peripheral devices.
2. Connect the power cords (system-unit side only) to the system unit, the display, and all other peripheral devices.
3. Plug the power cords from the system unit, display, and other devices into properly grounded electrical outlets.

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## Task 6. Perform Check-Out Procedure

### Attention

Before you continue, be sure to set the voltage switch on the power supply correctly for your power source, as explained in “Task 2. Check the Voltage Setting” on page 2-1. If you set it to the wrong position, you might damage your system unit when you turn it on.

Perform the check-out procedure at least once to determine whether the system unit is functioning properly and to familiarize yourself with the power-on sequence. In this way, you will become acquainted with what messages to expect.


1. Turn on your display and adjust the brightness and contrast controls to the approximate midpoint. (You can readjust these controls for personal viewing comfort after you turn on your system unit.)

2. Turn on the system unit.

The power-on light comes on.

3. Watch the display messages and the speaker LED. A series of coded messages should appear on the screen, and the speaker LED should blink once. These messages are part of the normal power-on process that occurs each time you switch on the system unit. The following is a typical power-on sequence:

- a. A blinking cursor appears on the screen.

- b. After a short time, an icon depicting a system-unit screen (  ) appears in the upper-right corner, and the memory-test message appears in the upper-left corner.

- c. The system unit starts the power-on self test (POST).

4. After the system completes POST, the amount of available memory is displayed, and a single flash on the speaker LED occurs.

- If the system completes POST successfully, proceed to “Task 8. Finish the Installation” on page 2-4.
- If the system does not complete POST successfully, an error code is displayed. Also, either no flash, or multiple flashes, might occur on the speaker LED.
  - If you have changed the configuration by adding or changing options, the screen will display an error message indicating that the Configuration/Setup Utility must be run. In that case, perform “Task 7. Run the Configuration/Setup Utility Program” on page 2-4, and then perform this task again to complete the system-unit check-out.
  - Check the screen for the error message, and see “Troubleshooting Charts” on page 5-4 to resolve the problem.

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## Task 7. Run the Configuration/Setup Utility Program

If your system unit has never had its Configuration/Setup Utility program run, or if you have changed the configuration by adding or changing a feature, run the Configuration/Setup Utility program as described in "Using the Configuration/Setup Utility Program" on page 4-6, and then return to "Task 6. Perform Check-Out Procedure" on page 2-3.

**Note:** This step assumes you have installed all options in your system unit, as instructed in "Task 4. Install Internal Options" on page 2-2. If you have not, install those options now. For option installation instructions, use the appropriate procedures in Chapter 3, "Installing Options."

If you have no device drivers to install, proceed to the next step.

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## Task 8. Finish the Installation

Your system unit hardware is now set up, and you are ready to finish the installation by installing the required software and completing the paperwork. The final steps are different for various configurations and applications, but you can use the following checklist as a guide.

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### — **Install your operating system.**

Refer to the documentation and instructions supplied with your operating system.

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### — **Install device drivers**

Refer to the information that came with the options you installed for instructions on installing device drivers.

For instructions on installing the video, Ethernet, watchdog timer, and thermal monitor device drivers, refer to the readme files on the IBM Embedded Systems CD. The latest updates are under *Support Information* on the Web at:

<http://www.clearlake.ibm.com/mfg/bocaraton/Services/IC/>

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### — **Install your application programs.**

Refer to the documentation and instructions supplied with your application programs.

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### — **Make any backup copies necessary.**

It is very important that you keep a backup copy of the system partition, reference diskette, hard files, and so forth, in case of possible future use.

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### — **Record your identification numbers.**

Your system unit might have important identification information that you might need if you have it serviced or if you need to order duplicate keys (for keylock-equipped systems). You should record all such information in Appendix A, "System Records" or in another safe place.